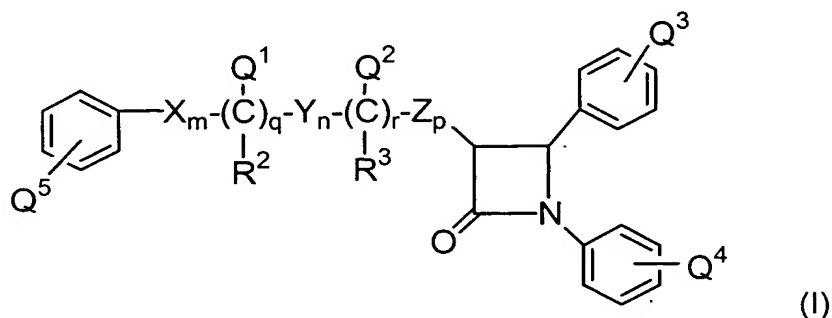


THEREFORE, WE CLAIM:

1. A compound represented by the structural formula (I):



or pharmaceutically acceptable isomers, salts, solvates or esters of the compound of Formula (I),

wherein in Formula (I) above:

X, Y and Z can be the same or different and each is independently selected from the group consisting of $-\text{CH}_2-$, $-\text{CH}(\text{alkyl})-$ and $-\text{C}(\text{alkyl})_2-$;

Q^1 and Q^2 can be the same or different and each is independently selected from the group consisting of H, $-(\text{C}_0\text{-C}_{30} \text{ alkylene})\text{-G}$, $-\text{OR}^6$, $-\text{OC}(\text{O})\text{R}^6$, $-\text{OC}(\text{O})\text{OR}^9$, $-\text{OC}(\text{O})\text{NR}^6\text{R}^7$, and $-\text{L-M}$;

Q^3 is 1 to 5 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, $-(\text{C}_0\text{-C}_{30} \text{ alkylene})\text{-G}$, $-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-OR}^6$,

$-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{R}^6$, $-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{OR}^6$, $-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-OC}(\text{O})\text{R}^6$, $-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-OC}(\text{O})\text{OR}^9$, $-\text{CH}=\text{CH}\text{-C}(\text{O})\text{R}^6$, $-\text{CH}=\text{CH}\text{-C}(\text{O})\text{OR}^6$,

$-\text{C}\equiv\text{C}\text{-C}(\text{O})\text{OR}^6$, $-\text{C}\equiv\text{C}\text{-C}(\text{O})\text{R}^6$, $-\text{O}\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-OR}^6$,

$-\text{O}\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{R}^6$, $-\text{O}\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{OR}^6$, $-\text{CN}$,

$-\text{O}\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{NR}^6\text{R}^7$, $-\text{O}\text{-(C}_0\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{NR}^6\text{NR}^7\text{C}(\text{O})\text{OR}^6$,

$-\text{O}\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})(\text{aryl})\text{-N-N=N}^+$, $-\text{OC}(\text{O})\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{OR}^6$,

$-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{NR}^6\text{R}^7$, $-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-OC}(\text{O})\text{NR}^6\text{R}^7$, $-\text{NO}_2$,

$-(\text{C}_0\text{-C}_{10} \text{ alkylene})\text{-NR}^6\text{R}^7$, $-\text{O}\text{-(C}_2\text{-C}_{10} \text{ alkylene})\text{-NR}^6\text{R}^7$, $-\text{NR}^6\text{C}(\text{O})\text{R}^7$, $-\text{NR}^6\text{C}(\text{O})\text{OR}^9$,

$-\text{NR}^6\text{C}(\text{O})\text{NR}^7\text{R}^8$, $-\text{NR}^6\text{S}(\text{O})_{0-2}\text{R}^9$, $-\text{N}(\text{S}(\text{O})_{0-2}\text{R}^9)_2$, $-\text{CHNOR}^6$, $-\text{C}(\text{O})\text{NR}^6\text{R}^7$,

$-\text{C}(\text{O})\text{NR}^6\text{NR}^6\text{R}^7$, $-\text{S}(\text{O})_{0-2}\text{NR}^6\text{R}^7$, $-\text{S}(\text{O})_{0-2}\text{R}^9$, $-\text{O}\text{-C}(\text{O})\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-C}(\text{O})\text{NR}^6\text{R}^7$,

$-\text{OC}(\text{O})\text{-(C}_1\text{-C}_{10} \text{ alkylene})\text{-NR}^6\text{C}(\text{O})\text{O-(alkylaryl)}$, $-\text{P}(\text{O})(\text{OR}^{10})_2$,

-(C₁-C₁₀ alkylene)-OSi(alkyl)₃, -CF₃, -OCF₃, halo, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxyacylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkylidoyl, allyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl, benzoylbenzoyloxy, heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonylalkoxy and -L-M;

Q⁴ is 1 to 5 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, -(C₀-C₃₀ alkylene)-G, -(C₀-C₁₀ alkylene)-OR⁶, -(C₀-C₁₀ alkylene)-C(O)R⁶, -(C₀-C₁₀ alkylene)-C(O)OR⁶, -(C₀-C₁₀ alkylene)-OC(O)R⁶, -(C₀-C₁₀ alkylene)-OC(O)OR⁹, -CH=CH-C(O)R⁶, -CH=CH-C(O)OR⁶, -C≡C-C(O)OR⁶, -C≡C-C(O)R⁶, -O-(C₁-C₁₀ alkylene)-OR⁶, -O-(C₁-C₁₀ alkylene)-C(O)R⁶, -O-(C₁-C₁₀ alkylene)-C(O)OR⁶, -CN, -O-(C₁-C₁₀ alkylene)-C(O)NR⁶R⁷, -O-(C₀-C₁₀ alkylene)-C(O)NR⁶NR⁷C(O)OR⁶, -O-(C₁-C₁₀ alkylene)-C(O)(aryl)-N=N⁺, -OC(O)-(C₁-C₁₀ alkylene)-C(O)OR⁶, -(C₀-C₁₀ alkylene)-C(O)NR⁶R⁷, -(C₀-C₁₀ alkylene)-OC(O)NR⁶R⁷, -NO₂, -(C₀-C₁₀ alkylene)-NR⁶R⁷, -O-(C₂-C₁₀ alkylene)-NR⁶R⁷, -NR⁶C(O)R⁷, -NR⁶C(O)OR⁹, -NR⁶C(O)NR⁷R⁸, -NR⁶S(O)₀₋₂R⁹, -N(S(O)₀₋₂R⁹)₂, -CHNOR⁶, -C(O)NR⁶R⁷, -C(O)NR⁶NR⁶R⁷, -S(O)₀₋₂NR⁶R⁷, -S(O)₀₋₂R⁹, -O-C(O)-(C₁-C₁₀ alkylene)-C(O)NR⁶R⁷, -OC(O)-(C₁-C₁₀ alkylene)-NR⁶C(O)O-(alkylaryl), -P(O)(OR¹⁰)₂, -(C₁-C₁₀ alkylene)-OSi(alkyl)₃, -CF₃, -OCF₃, halo, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxyacylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkylidoyl, allyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl, benzoylbenzoyloxy, heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonylalkoxy and -L-M;

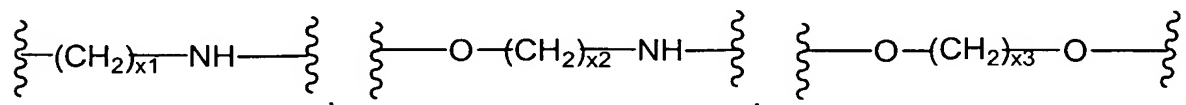
Q⁵ is 1 to 5 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, -(C₀-C₃₀ alkylene)-G, -(C₀-C₁₀ alkylene)-OR⁶, -(C₀-C₁₀ alkylene)-C(O)R⁶, -(C₀-C₁₀ alkylene)-C(O)OR⁶, -(C₀-C₁₀ alkylene)-OC(O)R⁶,

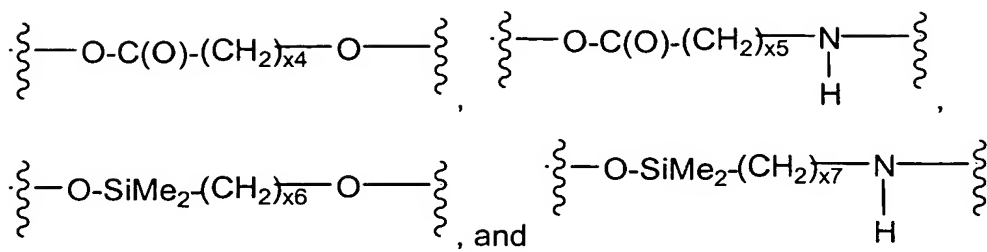
$-(C_0-C_{10} \text{ alkylene})-OC(O)OR^9$, $-CH=CH-C(O)R^6$, $-CH=CH-C(O)OR^6$,
 $-C\equiv C-C(O)OR^6$, $-C\equiv C-C(O)R^6$, $-O-(C_1-C_{10} \text{ alkylene})-OR^6$,
 $-O-(C_1-C_{10} \text{ alkylene})-C(O)R^6$, $-O-(C_1-C_{10} \text{ alkylene})-C(O)OR^6$, $-CN$,
 $-O-(C_1-C_{10} \text{ alkylene})-C(O)NR^6R^7$, $-O-(C_0-C_{10} \text{ alkylene})-C(O)NR^6NR^7C(O)OR^6$,
5 $-O-(C_1-C_{10} \text{ alkylene})-C(O)(\text{aryl})-N=N=N$, $-OC(O)-(C_1-C_{10} \text{ alkylene})-C(O)OR^6$,
 $-(C_0-C_{10} \text{ alkylene})-C(O)NR^6R^7$, $-(C_0-C_{10} \text{ alkylene})-OC(O)NR^6R^7$, $-NO_2$,
 $-(C_0-C_{10} \text{ alkylene})-NR^6R^7$, $-O-(C_2-C_{10} \text{ alkylene})-NR^6R^7$, $-NR^6C(O)R^7$, $-NR^6C(O)OR^9$,
 $-NR^6C(O)NR^7R^8$, $-NR^6S(O)_{0-2}R^9$, $-N(S(O)_{0-2}R^9)_2$, $-CHNOR^6$, $-C(O)NR^6R^7$,
 $-C(O)NR^6NR^6R^7$, $-S(O)_{0-2}NR^6R^7$, $-S(O)_{0-2}R^9$, $-O-C(O)-(C_1-C_{10} \text{ alkylene})-C(O)NR^6R^7$,
10 $-OC(O)-(C_1-C_{10} \text{ alkylene})-NR^6C(O)O-(\text{alkylaryl})$, $-P(O)(OR^{10})_2$,
 $-(C_1-C_{10} \text{ alkylene})-OSi(\text{alkyl})_3$, $-CF_3$, $-OCF_3$, halo, alkoxyalkoxy, alkoxyalkoxyalkoxy,
alkoxycarbonylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkylidioyl, allyloxy, aryl,
arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl,
benzoylbenzoyloxy, heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl,
15 heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonylalkoxy and
 $-L-M$;

wherein optionally one or more carbon atoms of the $-(C_0-C_{30} \text{ alkylene})$ - radical
 of Q^1 , Q^2 , Q^3 , Q^4 and Q^5 is independently replaced by $-O-$, $-C(O)-$, $-CH=CH-$,
 $-C\equiv C-$, $-N(\text{alkyl})-$, $-N(\text{alkylaryl})-$ or $-NH-$;

20 G is selected from the group consisting of a sugar residue, disugar residue,
 trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue,
 oligopeptide residue comprising 2 to 9 amino acids, trialkylammoniumalkyl radical and
 $-S(O)_2-OH$, wherein optionally the sugar residue, disugar residue, trisugar residue,
 tetrasugar residue, sugar acid, amino sugar, amino acid residue or oligopeptide
 25 residue of G is substituted with $-L-M$;

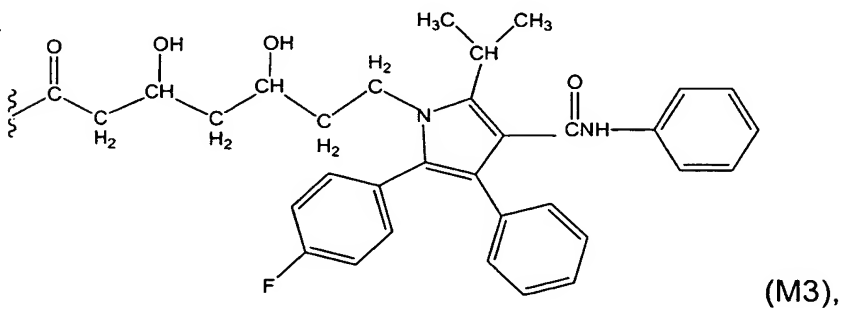
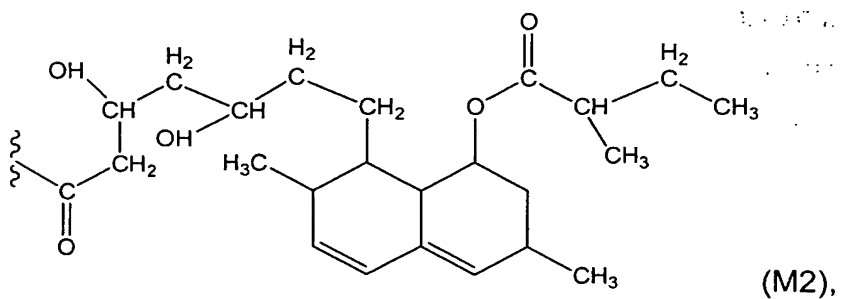
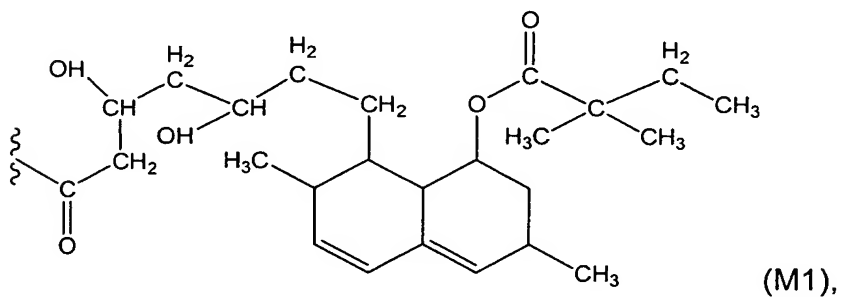
L is selected from the group consisting of

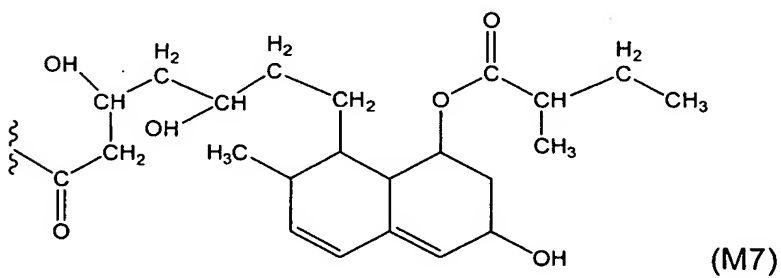
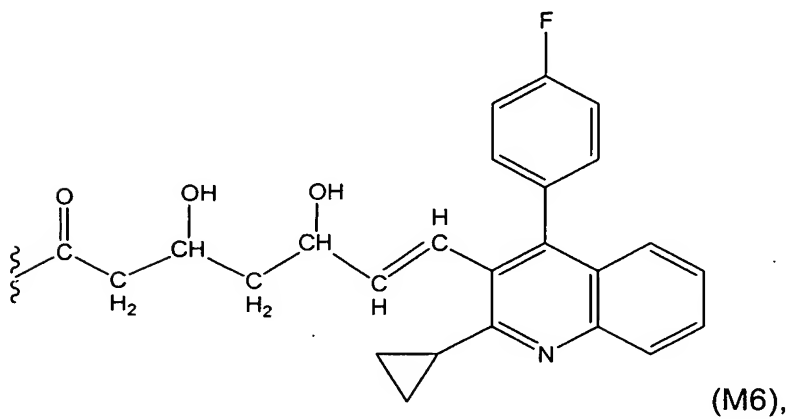
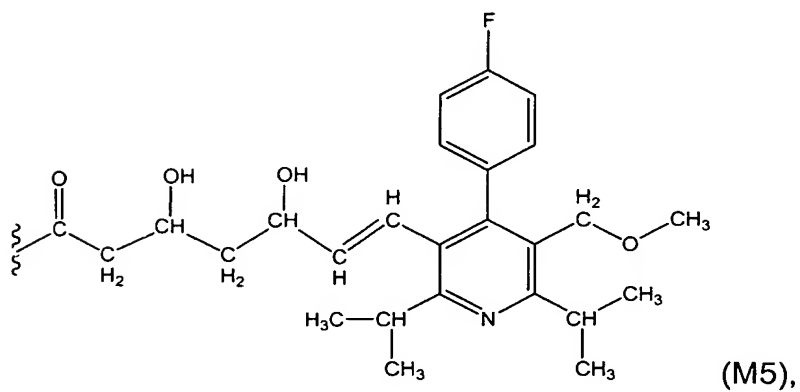
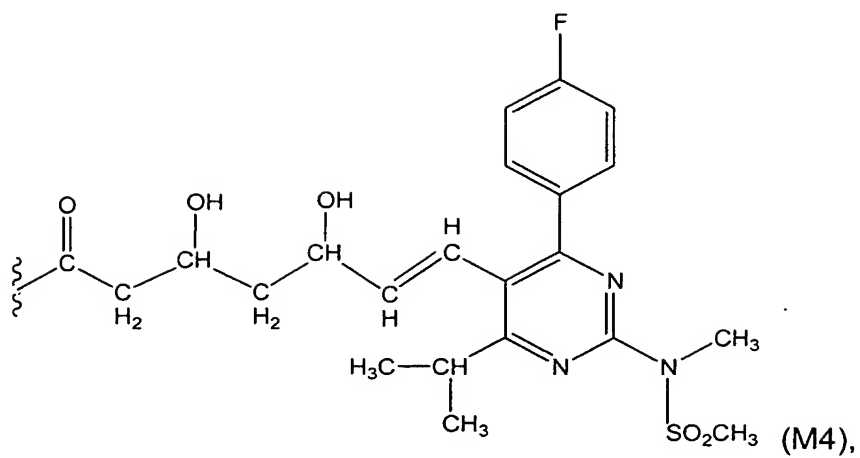




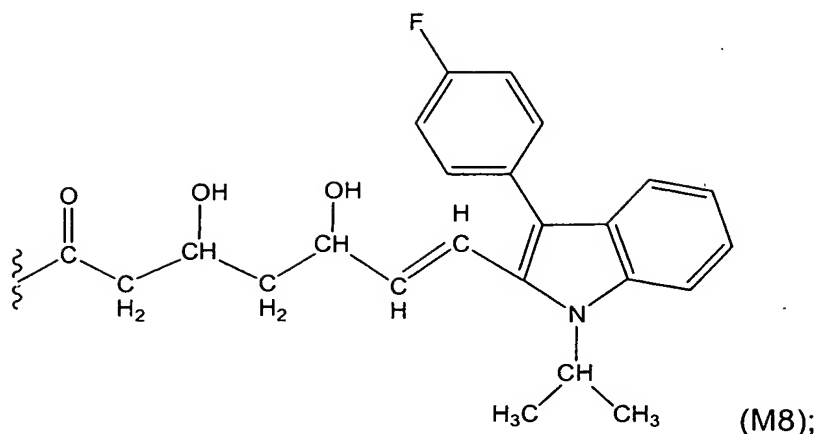
wherein Me is methyl;

M is selected from the group consisting of





5 and



R^2 and R^3 can be the same or different and each is independently selected from the group consisting of hydrogen, alkyl and aryl;

R^6 , R^7 and R^8 can be the same or different and each is independently selected from the group consisting of hydrogen, alkyl, aryl and arylalkyl; and

each R^9 is independently alkyl, aryl or arylalkyl.

each R^{10} is independently H or alkyl;

q is 0 or 1;

r is 0 or 1;

m, n and p are independently selected from 0, 1, 2, 3 or 4; provided that at least one of q and r is 1, and the sum of m, n, p, q and r is 1, 2, 3, 4, 5 or 6; and provided that when p is 0 and r is 1, the sum of m, q and n is 1, 2, 3, 4 or 5;

x1 is 1 to 10;

x2 is 1 to 10;

x3 is 1 to 10;

x4 is 1 to 10;

x5 is 1 to 10;

x6 is 1 to 10; and

x7 is 1 to 10;

with the proviso that at least one of Q^1 , Q^2 , Q^3 , Q^4 and Q^5 is -L-M or the sugar residue, disugar residue, trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue or oligopeptide residue of G is substituted with -L-M.

2. The compound according to claim 1, wherein m, n and r are each zero, q

is 1, p is 2, and Z is $-\text{CH}_2-$.

3. The compound according to claim 1, wherein m, n and r are each zero, q is 1, p is 2, and Z is $-\text{CH}_2-$, Q^1 is $-\text{OR}^6$, wherein R^6 is hydrogen and Q^5 is fluorine.

5

4. The compound according to claim 1, wherein R^2 and R^3 are each preferably hydrogen.

5. The compound according to claim 1, wherein Q^1 and Q^2 are each independently selected from the group consisting of $-\text{OR}^6$, $-\text{O}(\text{CO})\text{R}^6$, $-\text{O}(\text{CO})\text{OR}^9$ and $-\text{O}(\text{CO})\text{NR}^6\text{R}^7$.

10

6. The compound according to claim 1, wherein Q^4 is halo or $-\text{OR}^6$.

15

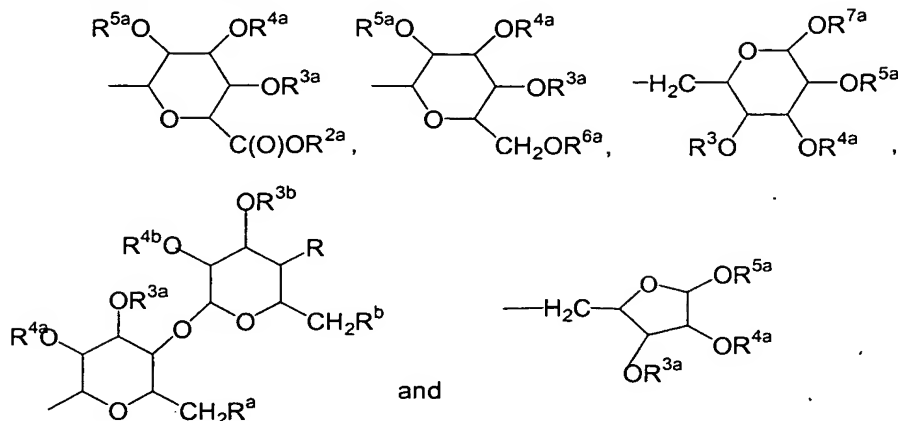
7. The compound according to claim 1, wherein Q^1 is $-\text{OR}^6$ wherein R^6 is H.

8. The compound according to claim 1, wherein Q^1 , Q^2 , Q^3 , Q^4 or Q^5 is—L—M.

20

9. The compound according to claim 1, wherein Q^1 , Q^2 , Q^3 , Q^4 or Q^5 is $-(\text{C}_0\text{-C}_{30} \text{ alkylene})\text{-G}$.

10. The compound according to claim 1, wherein G is selected from the group consisting of:



wherein R, R^a and R^b can be the same or different and each is independently selected from the group consisting of H, -OH, halo, -NH₂, azido, alkoxyalkoxy or -W-R³⁰;

W is independently selected from the group consisting of -NH-C(O)-, -O-C(O)-, -O-C(O)-N(R³¹)-, -NH-C(O)-N(R³¹)- and -O-C(S)-N(R³¹)-;

R^{2a} and R^{6a} can be the same or different and each is independently selected from the group consisting of H, alkyl, acetyl, aryl and arylalkyl;

R^{3a}, R^{4a}, R^{5a}, R^{7a}, R^{3b} and R^{4b} can be the same or different and each is independently selected from the group consisting of H, alkyl, acetyl, arylalkyl, -C(O)alkyl and -C(O)aryl;

R³⁰ is independently selected from the group consisting of R³²-substituted T, R³²-substituted-T-alkyl, R³²-substituted-alkenyl, R³²-substituted-alkyl, R³²-substituted-cycloalkyl and R³²-substituted-cycloalkylalkyl;

R³¹ is independently selected from the group consisting of H and alkyl;

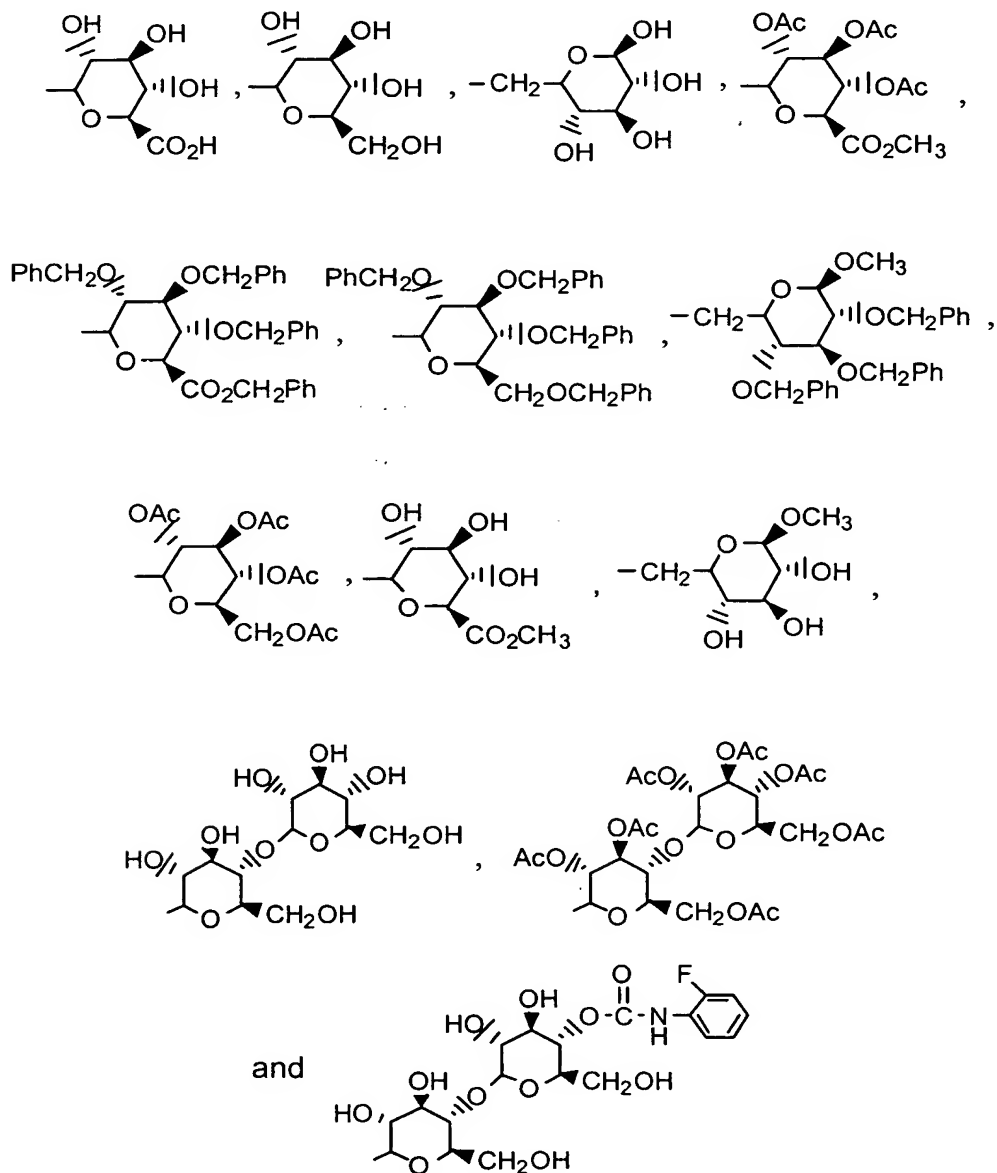
T is independently selected from the group consisting of phenyl, furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, benzothiazolyl, thiadiazolyl, pyrazolyl, imidazolyl and pyridyl;

R³² is 1 to 3 substituents which are each independently selected from the group consisting of H, halo, alkyl, -OH, phenoxy, -CF₃, -NO₂, alkoxy, methylenedioxy, oxo, alkylsulfanyl, alkylsulfinyl, alkylsulfonyl, -N(CH₃)₂, -C(O)-NHalkyl, -C(O)-N(alkyl)₂.

-C(O)-alkyl, -C(O)-alkoxy and pyrrolidinylcarbonyl; or R³² is a covalent bond and R³¹, the nitrogen to which it is attached and R³² form a pyrrolidinyl, piperidinyl, N-methyl-piperazinyl, indolyl or morpholyl group, or a alkoxy carbonyl-substituted pyrrolidinyl, piperidinyl, N-methylpiperazinyl, indolyl or morpholyl group.

5

11. The compound according to claim 10, wherein G is selected from:

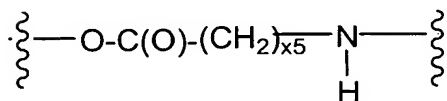


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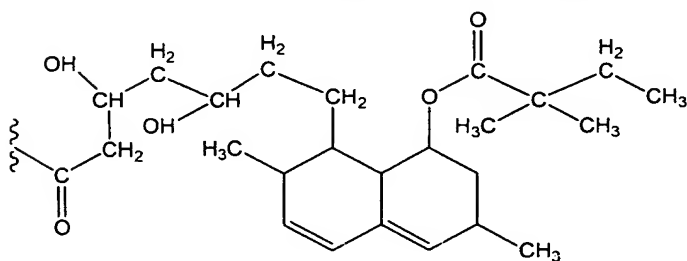
15 wherein Ac is acetyl and Ph is phenyl.

12. The compound according to claim 1, wherein optionally one or more carbon atoms of the $-(C_0-C_{30} \text{ alkylene})-$ radical of Q^1 , Q^2 , Q^3 , Q^4 and Q^5 is independently replaced by $-O-$.

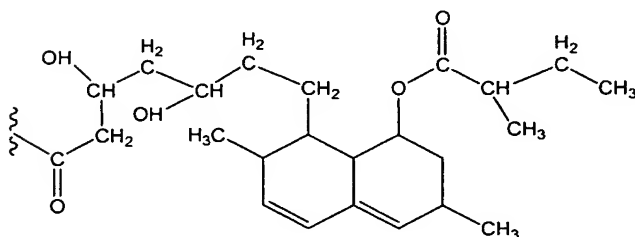
13. The compound according to claim 1, wherein L is



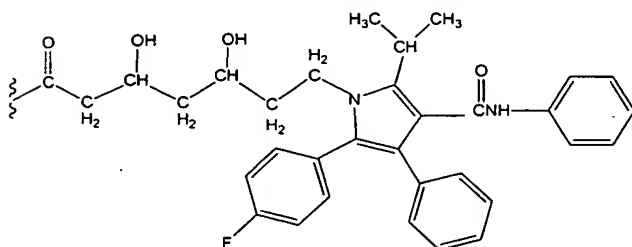
14. The compound according to claim 1, wherein M is



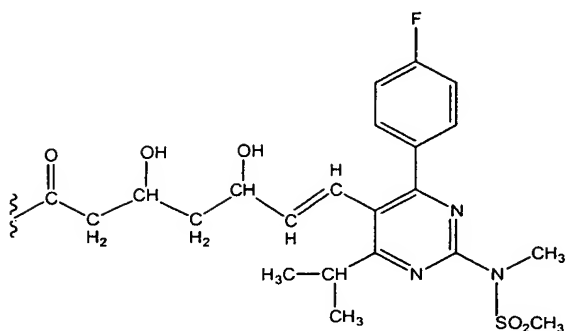
15 The compound according to claim 1, wherein M is



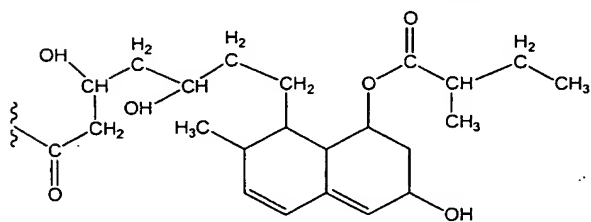
16. The compound according to claim 1, wherein M is



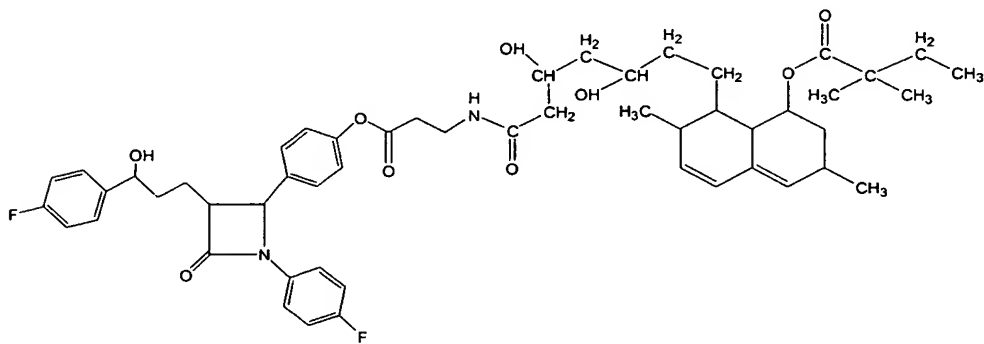
17. The compound according to claim 1, wherein M is



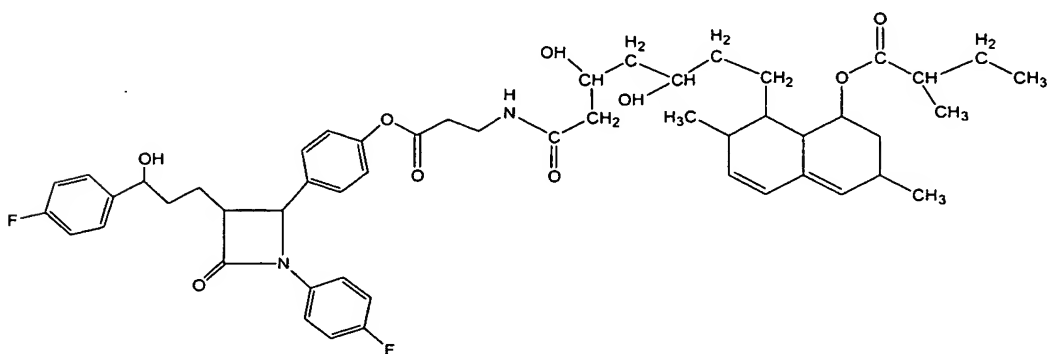
18. The compound according to claim 1, wherein M is



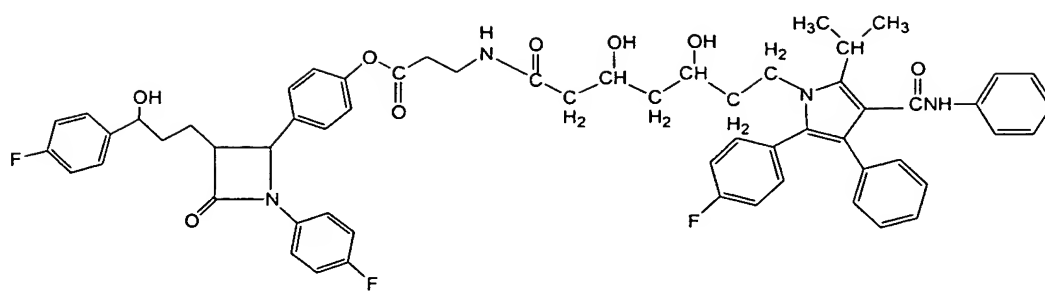
19. The compound according to claim 1, which is selected from the group consisting of



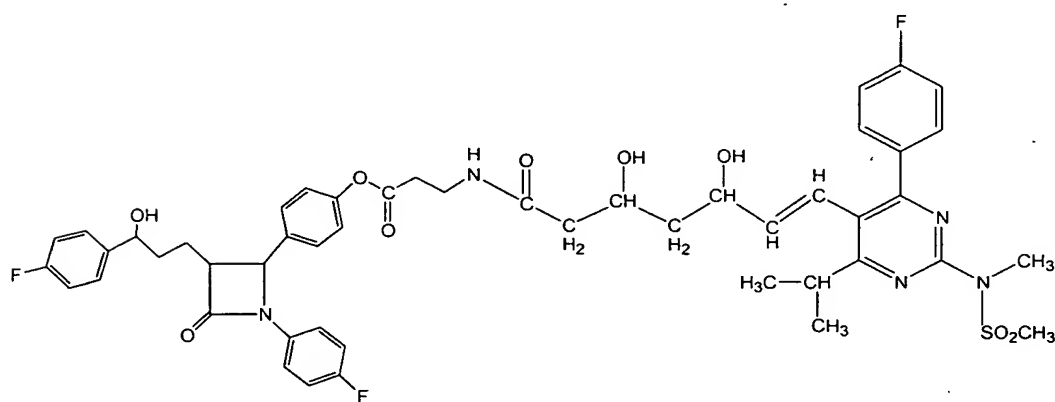
(11),



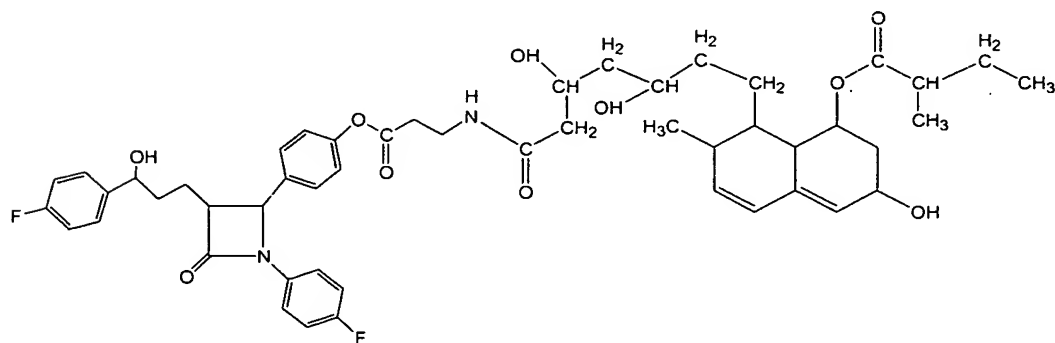
(III),



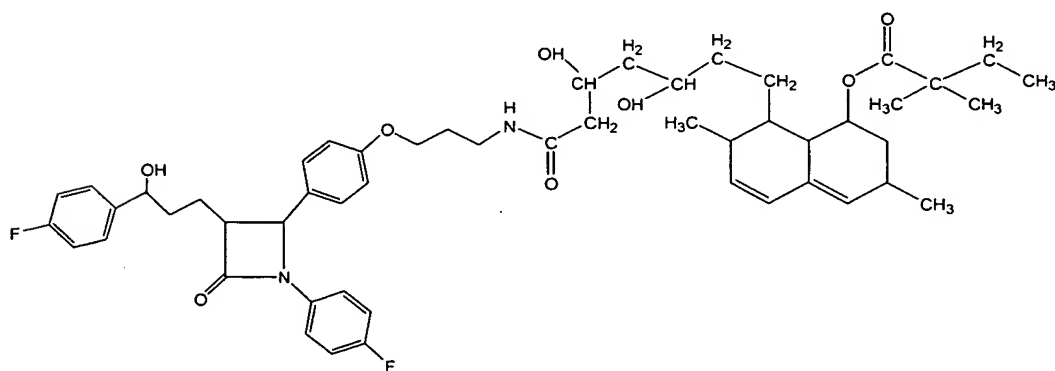
(IV),



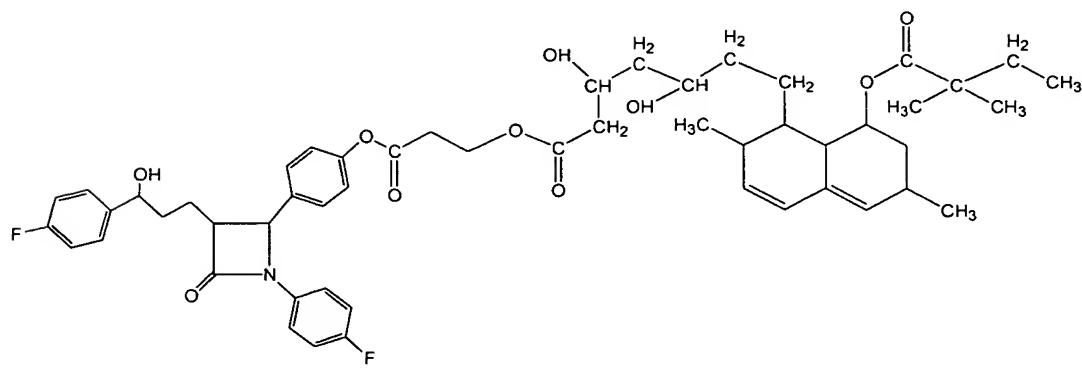
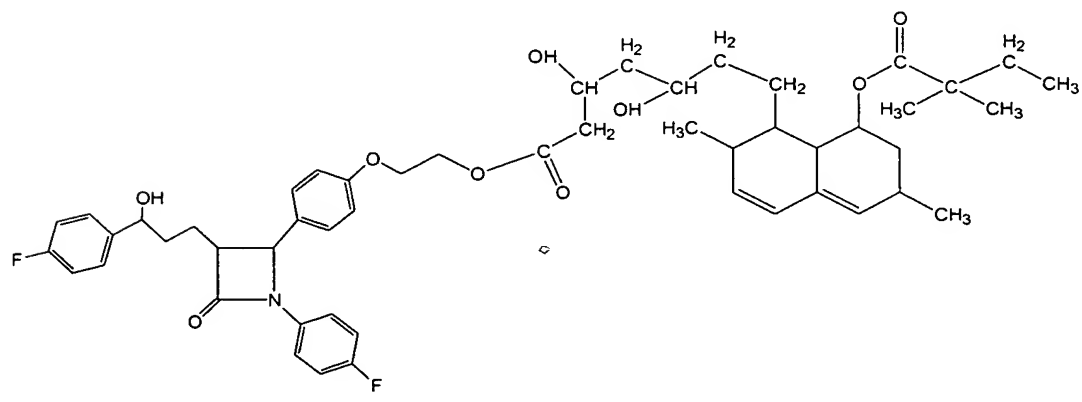
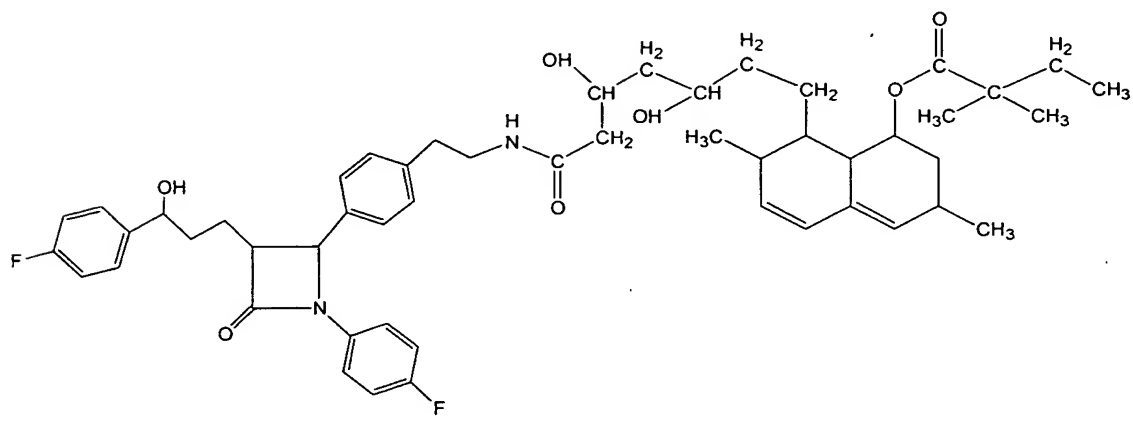
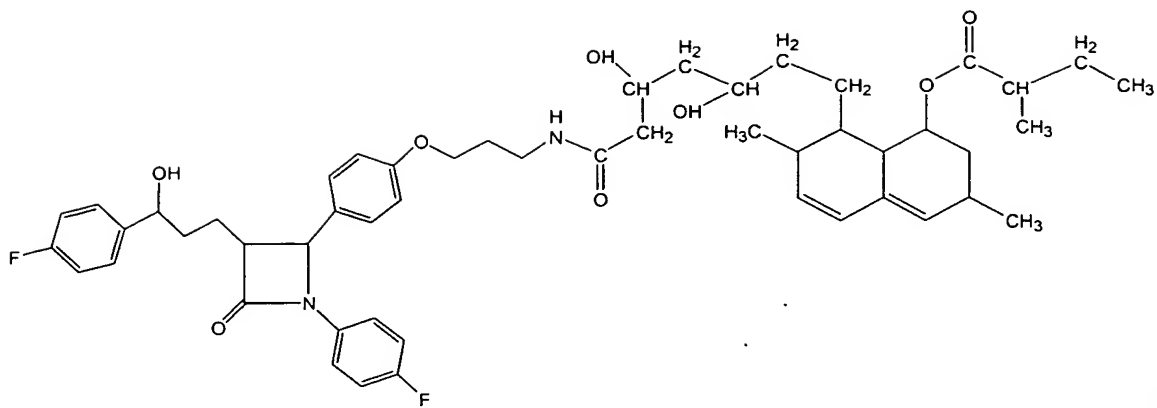
(V),

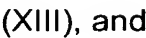


(VI),



(VII),





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21. A pharmaceutical composition comprising a cholesterol-lowering effective amount of a compound of claim 1 in a pharmaceutically acceptable carrier.

5 22. A method of treating or preventing a vascular condition, diabetes, obesity, stroke, lowering a concentration of a sterol or stanol in plasma of a mammal, preventing demyelination or treating Alzheimer's disease or regulating a level of an amyloid β peptide in a subject comprising the step of administering to a subject in need of such treatment an effective amount of a compound, of claim 1.

10 23. A method of lowering cholesterol level in plasma of a mammal in need of such treatment comprising administering a pharmaceutically effective amount of the compound of claim 1.